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<table style="width: 100%; border: none;"> <tr> <td style="width: 50%; vertical-align: top; padding: 5px;"> (21) International Application Number: PCT/US97/12049 (22) International Filing Date: 11 July 1997 (11.07.97) (30) Priority Data: 08/678,910 08/794,958 12 July 1996 (12.07.96) 4 February 1997 (04.02.97) US US (71) Applicant: EXXON RESEARCH AND ENGINEERING COMPANY [US/US]; 180 Park Avenue, P.O. Box 390, Florham Park, NJ 07932-0390 (US). (72) Inventors: KIM, Jecnok, T.; 23 Stage Coach Drive, Holmdel, NJ 07733 (US). GODICI, Patrick, E.; 183 Northfield Road, Millington, NJ 07946 (US). BERLOWITZ, Paul, J.; 939 Jamestown Road, East Windsor, NJ 08520 (US). BELTZER, Morton; 724 Norman Place, Westfield, NJ 07090 (US). (74) Agents: ALLOCCA, Joseph, J. et al.; Exxon Research and Engineering Company, P.O. Box 390, Florham Park, NJ 07932-0390 (US). </td> <td style="width: 50%; vertical-align: top; padding: 5px;"> (81) Designated States: CA, JP, SG, European patent (AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE). Published <i>With international search report.</i> REPLACED SHEETS SG ☐ Description : paged to paged ☐ Claim(s) : paged to paged ☐ Drawing(s) : paged to paged ☐ Abstract : paged to paged </td> </tr> </table>			(21) International Application Number: PCT/US97/12049 (22) International Filing Date: 11 July 1997 (11.07.97) (30) Priority Data: 08/678,910 08/794,958 12 July 1996 (12.07.96) 4 February 1997 (04.02.97) US US (71) Applicant: EXXON RESEARCH AND ENGINEERING COMPANY [US/US]; 180 Park Avenue, P.O. Box 390, Florham Park, NJ 07932-0390 (US). (72) Inventors: KIM, Jecnok, T.; 23 Stage Coach Drive, Holmdel, NJ 07733 (US). GODICI, Patrick, E.; 183 Northfield Road, Millington, NJ 07946 (US). BERLOWITZ, Paul, J.; 939 Jamestown Road, East Windsor, NJ 08520 (US). BELTZER, Morton; 724 Norman Place, Westfield, NJ 07090 (US). (74) Agents: ALLOCCA, Joseph, J. et al.; Exxon Research and Engineering Company, P.O. Box 390, Florham Park, NJ 07932-0390 (US).	(81) Designated States: CA, JP, SG, European patent (AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE). Published <i>With international search report.</i> REPLACED SHEETS SG ☐ Description : paged to paged ☐ Claim(s) : paged to paged ☐ Drawing(s) : paged to paged ☐ Abstract : paged to paged
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(54) Title: SULFUR-CONTAINING CARBOXYLIC ACID DERIVATIVES TO REDUCE DEPOSIT FORMING TENDENCIES AND IMPROVE ANTIOXIDANCY OF AVIATION TURBINE OILS (57) Abstract The present invention resides in a turbo oil composition exhibiting enhanced antioxidancy and resistance to deposit formation, and to a method for achieving that result in turbo oils. The gas turbine lubricating oil of the present invention comprises a major proportion of synthetic polyol ester based base stock including diesters and polyol esters, preferably polyol ester based base stock and a minor proportion of an antioxidant/deposit control additive, specifically a sulfur-containing carboxylic acid (SCCA) derivative. Other conventional additives such as extreme pressure, pour point reduction, oxidative stability, anti-foaming, hydrolytic stability, improved viscosity index performance, anti-wear, and corrosion inhibitor additives and others may also be employed. The use of SCCA derivative produces a turbo oil exhibiting markedly superior oxidation stability and deposit control performance compared to that exhibited by turbo oil without the SCCA derivative. REPLACED SHEETS SG ☐ Description : paged to paged ☒ Claim(s) : paged 18 to paged 21..... ☐ Drawing(s) : paged to paged ☐ Abstract : paged to paged				